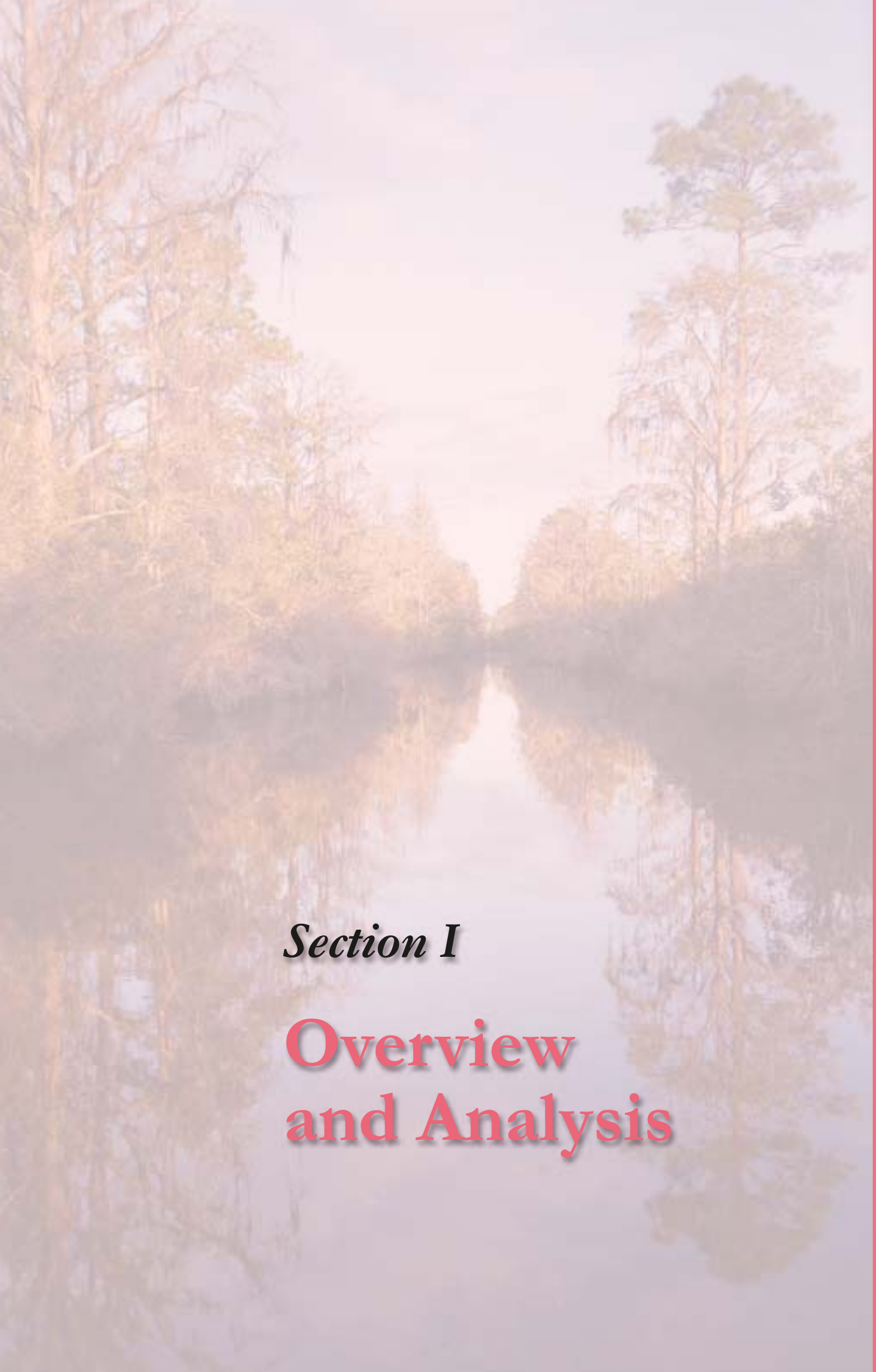


Section I

Overview and Analysis

OVERVIEW AND ANALYSIS

INTRODUCTION

The mission of the U.S. Environmental Protection Agency (EPA) is to protect human health and to safeguard the natural environment—air, water, and land—upon which life depends. The Agency is committed to making America's air cleaner, water purer, and land better protected and to working closely with its federal, state, tribal, and local government partners; with citizens; and with the regulated community to accomplish these goals. To carry out its mission, EPA has established 10 long-term strategic goals that identify the environmental results the Agency is working to achieve and reflect the sound financial and management practices it intends to employ. Each year, as required under the Government Performance and Results Act (GPRA), the Agency develops an annual plan that translates these long-term goals and objectives into specific actions to be taken and resources to be used during the fiscal year. EPA is accountable to the American people for making progress toward its long-term goals by achieving these annual performance goals (APGs) and using taxpayer dollars efficiently and effectively to do so.

To manage its work and resources most effectively to achieve measurable environmental results, for the past 3 years EPA has linked its long-term and annual planning, budgeting, financial accounting, and performance reporting. For example, EPA has structured its strategic plan to encompass the full scope of its workforce and resources and has restructured its budget and finance processes to mirror strategic goals and objectives. To this end, the Agency's strategic goals include both environmentally oriented goals, such as Clean Air and Safe Water, and functional goals, such as Sound Science and Effective Management, which are critical to achieving environmental and human health outcomes. Linking planning, budgeting, and finance helps EPA to focus resource management on the environmental and human health results to be achieved, provides longer term perspective and continuity for budgeting, and reinforces the importance of financial stewardship and fiscal integrity in achieving the Agency's mission. As a result, EPA can demonstrate to Congress and the public how taxpayer dollars are applied across the Agency's strategic goals to support the achievement of environmental results.

EPA's *Fiscal Year 2001 Annual Report* demonstrates the Agency's accountability to Congress and the American people. First, the *Report* describes the progress that EPA—working with its federal, state, tribal, and local government partners—made toward the annual performance goals established in its Fiscal Year (FY) 2001 Annual Plan and toward its longer range strategic goals. Next, it discusses major management challenges EPA faced during the year and presents the Agency's approaches, solutions, and accomplishments. Finally, after summarizing EPA's financial activities and achievements, it presents the annual financial statements, a portrayal of the Agency's financial position independently audited by EPA's Inspector General.

This Overview and Analysis, which addresses requirements for a "Management's Discussion and Analysis" of the annual financial statements component of the *Fiscal Year 2001 Annual Report*,[1] is intended to provide a broad view of EPA's performance and fiscal accountability over the year. In discussing performance results, it focuses on accomplishments that contributed to environmental achievements, particularly under EPA's Goals 1 through 6. The goal chapters that follow in Section II provide a more extensive discussion of progress and achievements under all goals. The Overview and Analysis also presents approaches and tools the Agency is using to improve results, reviews EPA's financial accomplishments, and discusses significant factors that might affect future Agency operations.

PERFORMANCE RESULTS

During FY 2001 EPA, working with its federal, state, tribal, and local government partners, continued to make significant progress toward a healthier environment—cleaner air, purer water, and better protected land. The discussion that follows briefly describes results achieved over the past fiscal year: it

[1] Because the *Fiscal Year 2001 Annual Report* consolidates a number of specific reports, some required components of the "Management's Discussion and Analysis" are presented in greater detail elsewhere in this report. In particular, EPA's mission statement and long-range goals appear at the front of the report and an EPA organization chart is included as Appendix C. For a discussion of the Agency's performance goals, objectives, and results, refer to Section II. Management accomplishments and challenges are discussed in Section III. Financial statements, along with a discussion of systems, controls, and legal compliance, are presented in Section IV.

highlights environmental achievements, notes Agency accomplishments in improved management and other functions, aggregates performance results in terms of annual performance goals met and missed, and discusses performance issues and concerns.

Environmental Accomplishments

Under EPA's Clean Air goal, the Agency and its partners continued to improve air quality and to protect the health of all the public, including sensitive populations such as asthmatics, children, and seniors, from the hazards of air pollution. Since the Clean Air Act Amendments of 1990 EPA and its partners have dramatically reduced air pollution from mobile and stationary sources to meet the National Ambient Air Quality Standards (NAAQS) and have reduced acid rain and toxic air pollution to safeguard public health and the environment. Sulfur dioxide (SO_2) and nitrogen oxide (NO_x) gases, for example, form fine particles that, when inhaled, contribute to premature mortality, chronic bronchitis, and other respiratory problems and, in the environment, form haze resulting in decreased visibility.

During FY 2001 people who lived in all counties in which concentrations of nitrogen dioxide (NO_2) or SO_2 were measured breathed air that met NAAQS for these pollutants. Today all areas of the country are in attainment for NO_2; compared to 1990, fewer than half as many people live in counties where monitored air quality exceeds the NAAQS for carbon monoxide; and only 1.5 million people live in counties where lead levels exceed the NAAQS. In terms of ozone, air quality continues to improve: nearly half the areas out of attainment with the 1-hour NAAQS for ozone in 1991 have been brought into attainment and have approved maintenance plans.

In FY 2001 EPA issued far-reaching rules that will dramatically reduce pollution from heavy-duty trucks and buses and cut sulfur levels in diesel fuel, thereby providing the cleanest running heavy-duty trucks in history. These vehicles will be 90 percent cleaner than today's trucks and buses, resulting in an annual reduction of 2.6 million tons of NO_x emissions by calendar year 2030. In addition, during calendar year 2000 EPA's Acid Rain Program controlled annual SO_2 emissions from utility sources to 11.2 million tons. Compared to the 17.5 million tons released in 1980, this reduction represents a decrease of 6.3 million tons in annual emissions and puts the Agency well on the way to achieving its 2010 goal of reducing SO_2 emissions to 8.5 million tons per year. Further, the Acid Rain Program reduced annual NO_x emissions from coal-fired utility sources by more than 2 million tons below those that would have occurred in the absence of the Clean Air Act Amendments of 1990. In the area of air toxics, as of FY 2001 emissions from area, mobile, and stationary sources had decreased by 35 percent from the 1993 baseline of 4.3 million tons.

During FY 2001 EPA continued its work to ensure that all people have drinking water that is clean and safe to drink; that the Nation's rivers, lakes, wetlands, aquifers, and coastal and ocean waters are healthy; and that watersheds and aquatic ecosystems will be restored and protected. Although population growth, as well as urban and rural nonpoint source pollution, continues to challenge the capability of community water systems to provide safe drinking water, in FY 2001, 91 percent of people served by community water systems received water that complied with all health-based standards. In addition, during FY 2001 drinking water facilities completed 469 infrastructure improvement projects to help maintain this high level of public health protection.

Ensuring protection of America's land unites a variety of efforts under a number of the Agency's strategic goals. Throughout FY 2001 EPA worked closely with its federal, state, tribal, and local government partners to ensure that the public has food that is safe to eat and are protected from health threats posed by pesticide residues. The Agency expanded the availability of reduced-risk pesticides and alternatives to organophosphates to reduce health and environmental risks from pesticide use while maintaining the vigor of the country's agricultural production. In addition to preventing pollution from pesticides and other chemicals, the Agency continued its work to reduce risk in communities, homes, workplaces, and ecosystems. Culminating more than 5 years of work, in FY 2001 the Agency promulgated the Lead Hazard Rule, which defines specific levels of lead in dust and soil to be considered "lead-based paint hazards." EPA estimates that, as response actions are taken in homes that exceed these standards, approximately 46 million children will benefit from reduced exposure to lead in paint, dust, and soil over the next 50 years.

Critical to protecting the Nation's land are better waste management, restoration of contaminated sites,

and rapid and effective response to waste-related or industrial accidents and emergencies. In FY 2001 EPA's Emergency Response Program responded rapidly and effectively to the terrorist incidents of September 11 and to subsequent acts of bioterrorism. EPA employees were on the ground within hours of the attacks at the World Trade Center and the Pentagon, monitoring for contamination, assisting with waste management, advising on cleanup and decontamination, and providing information to the public. At the World Trade Center, EPA assumed the lead role for coordination of the federal hazardous materials response. When outbreaks of anthrax bioterrorism occurred in early October 2001, EPA response personnel were among the first on the scene. They led the effort to clean up and decontaminate six post offices in Florida and four Congressional office buildings in Washington, DC—the Ford, Longworth, Dirksen, and Hart buildings. Because of their expertise in environmental matters, EPA criminal investigators assisted the Federal Bureau of Investigation in the investigation of the attack.

Apart from these emergency situations, the Agency, working cooperatively with states, tribes, and the regulated community, continued to improve environmental conditions and protect human health by cleaning up hazardous waste sites and seeking to return abandoned or underutilized industrial and commercial properties to productive use. In FY 2001 the Superfund Program achieved 47 construction completions. ("Construction completion" refers to the point at which a site remedy is in place, safeguards prevent the spread of further contamination, and no further cleanup construction is needed.) The Superfund Program also cleaned up 2 million cubic yards of solid hazardous waste and 68,000 gallons of liquid-based waste as a result of removal response actions. The Agency and its partners provided alternative drinking water supplies to 1,000 people at 6 sites. Additionally, EPA cleaned up 302 Superfund removal sites and 19,074 leaking underground storage tanks. From the program's inception through the third quarter of FY 2001, EPA's Brownfields Program, one of the Agency's most successful public partnerships, leveraged more than $3.73 billion in public and private investments and helped create more than 17,000 jobs in cleanup, construction, and redevelopment.

EPA continued to work with other nations and to lead multilateral efforts to reduce global and cross-border environmental risks. For example, the Agency and its partners made significant progress in protecting and improving environmental conditions in the Great Lakes region, removing or containing more than 400,000 cubic yards of contaminated sediments in FY 2000[2] ; releasing the *State of the Great Lakes 2001* report, for which more than 50 governmental and nongovernmental entities used 33 indicators to assess the health of the Great Lakes; and demonstrating glass furnace technology on 70 tons of Fox River sediment near Green Bay, Wisconsin. (Glass furnace technology destroys organic contaminants and immobilizes inorganic metals in a glass matrix that can then be used as construction fill or for other beneficial uses.)

Results reported in FY 2001 demonstrate that EPA's voluntary ENERGY STAR program, methane outreach programs, and High Global Warming Potential (HGWP) environmental stewardship program have increased the penetration of energy-efficient products into the marketplace through effective program planning, implementation, and outreach to manufacturers and consumers. The ENERGY STAR label, for example, has become a national symbol for energy efficiency recognized by more than 40 percent of the people. These voluntary programs yield an immediate impact on environmental improvement. In results reported in FY 2000, actions taken through EPA's voluntary climate programs such as ENERGY STAR have saved consumers and businesses more than $8 billion on their energy bills and saved 74 billion kilowatt-hours and more than 10,000 megawatts of peak power. In addition, emissions of almost 160,000 tons of smog-forming NO_x were prevented in 2000, equivalent to the annual emissions from more than 100 power plants.

Finally, EPA's ongoing efforts to promote and monitor compliance and to enforce environmental statutes and regulations continued to advance results in environmental and human health protection. For example, in FY 2001 EPA reached settlements with four major petroleum refiners to resolve significant areas of noncompliance with the Clean Air Act. The settlements, adding pollution controls and operation changes at 27 separate refineries representing approximately 28.8 percent of the Nation's domestic

[2] During FY 2001 new FY 2000 performance data became available for several EPA programs for which there were delayed reporting cycles or targets set beyond FY 2000. These FY 2000 data represent the Agency's latest results information; FY 2001 data will become available in spring 2002.

refining capacity, will result in an estimated annual reduction of 87,000 tons of SO_x, 49,500 tons of NO_x, 8,220 tons of volatile organic compounds, and 2,100 tons of particulate matter (PM). In addition, the companies will spend $12 million in a variety of Supplemental Environmental Projects (SEPs) to improve the environment. The SEPs will provide a variety of environmental benefits, including dissemination of information to the public about local environmental issues, additional ambient monitoring, and increased facility controls. One creative SEP will support an effort to reduce emissions from school buses, while another will provide for enhanced public access to permit and compliance information.

Other Agency Accomplishments

To carry out its mission and achieve environmental and human health results, EPA must function effectively as an organization, serve the public responsively and efficiently, work well with its partners and stakeholders, and make the most of its resources—such as quality environmental information and sound science—to inform decision making and advance its efforts. During FY 2001 EPA expanded its multiyear planning to address all major research programs and to allow better assessment of progress toward its strategic research objectives. The Agency continued to improve the collection, quality, and availability of environmental information and to develop and apply the best available science, an improved understanding of environmental risk, and greater innovation to detect emerging risks and to address environmental problems. For example, for EPA's on-line Integrated Risk Information System, the Agency completed or updated seven consensus human health assessments that describe the potential impacts of various chemicals found in the environment. This information will be used for hazard and dose-response evaluations in risk assessments across EPA, at the state level, and by the public and will provide information critical to developing EPA's regulatory standards and making site cleanup decisions. Similarly, in FY 2001 EPA completed a 5-year pilot of the Environmental Technology Verification program, through which the Agency can provide verified, commercial-ready technologies that eliminate, minimize, or control high-risk pollutants from multiple sectors.

In the area of improved management, EPA's most significant accomplishments reflect strides in strategic management of resources, as the Agency prepared to address the President's Management Agenda. Specifically EPA developed a human capital strategic plan, "Investing in Our People: EPA's Strategy for Human Capital, 2001 through 2003." In preparing the plan, Agency executives and human resources professionals worked in partnership to fine-tune goals, key strategies, and actions to address human resources. In FY 2001 EPA capitalized on the power of the Internet by implementing electronic processes that allow citizens, grantees, and vendors to transact business with the Agency on-line 24 hours a day, 7 days a week.

Summary of Performance Data

In FY 2001 EPA met 65 percent of the APGs for which data are provided in this report. (EPA committed to a total of 70 APGs in its FY 2001 Annual Plan; however, because data for 9 of these APGs will not be available until FY 2002 or later, they are not included in these tallies.) EPA also made significant progress toward the 20 APGs that were not achieved in FY 2001, and the Agency remains on track to meet the long-term goals and objectives associated with these annual targets.

During FY 2001 new performance data also became available for FY 2000 and FY 1999 APGs for which there were delayed reporting cycles or targets set beyond those fiscal years. EPA now has performance data for five of the nine FY 2000 APGs for which there were delayed reporting cycles or targets set beyond FY 2000. For example, the Agency met its goals for reducing greenhouse gas emissions and restricting consumption of ozone depleting substances. In summary, EPA can now report achievement of 81 percent (56) of the 69 APGs for which it has FY 2000 performance data. In addition, new performance data became available during FY 2001 for three of the seven FY 1999 APGs for which there were delayed reporting cycles or targets set beyond FY 1999. For FY 1999, EPA can now report achievement of 52 of the 65 APGs for which it has performance data. Delays in reporting cycles and targets set beyond the fiscal year continue to affect four FY 2000 APGs and four FY 1999 APGs.

Charts presenting EPA's FY 2001 performance results are provided with each goal chapter in Section II. These charts present performance data for each of the Agency's FY 2001 APGs.

Performance Issues and Concerns

Despite the best efforts of EPA and its partners, the Agency was not able to meet all planned targets for FY 2001. However, the Agency does not expect the shortfall in meeting these APGs to compromise progress toward achieving its long-range goals and objectives. For more than half of the missed APGs, EPA fell only slightly short of the targets and met the cumulative goals.

External factors contributed to over 75 percent of the missed APGs. For example, under its Clean Air goal, EPA sets targets for both the number of areas that will move from nonattainment to attainment for the six principal air pollutants and the number of people who will breathe cleaner air as a result. In FY 2001 EPA anticipated that five areas would request redesignation from nonattainment to attainment for the 1-hour ozone standard; however, only three areas were redesignated. States have been reluctant to request redesignation to the current 1-hour ozone standard as long as legal issues remain to be resolved by the courts concerning the more protective 8-hour standard that will replace the 1-hour standard. Despite this uncertainty, however, EPA and states continue to work together to ensure that areas are striving to meet or are maintaining the current 1-hour ozone standard.

For some missed APGs, shortfalls cannot be attributed to a single reason. For example, under the Agency's Clean Water goal, EPA missed its target for issuing National Pollutant Discharge Elimination System (NPDES) permits for major and minor point sources. NPDES permits reduce or eliminate discharges into the Nation's waters of inadequately treated wastewater from municipal and industrial facilities and of pollutants from urban storm water, combined sewer overflows, and concentrated animal feeding operations. In FY 2001 the Agency and its partners exceeded the target for permitting minor point sources, achieving 75 percent of a planned 66 percent; however, permits issued covered only 75 percent of the targeted 89 percent of major point sources. Many factors contributed to the permit backlog and missed target, including permit appeals and challenges, states' lack of or redirection of resources, newly adopted water quality standards that are increasingly comprehensive and more stringent, and the need to integrate individual permits with watershed and other planning processes.

In many cases, missed APGs represent "near misses." One such example falls under the Agency's leaking underground storage tank (LUST) program, which is responsible for cleaning up releases from underground storage tank systems containing gasoline, other petroleum products, or hazardous substances. In FY 2001 EPA and its state partners completed 19,074 cleanups, for a total of nearly 270,000 cleanups since FY 1987. The FY 2001 target of 21,000 LUST cleanups was not met, however, because of the increasing complexity of sites where contaminated groundwater has migrated off-site or which require groundwater cleanup. In addition, many cleanups were complicated by the presence of the contaminant methyl tertiary butyl ether (MTBE), a gasoline additive. These factors have resulted in longer-than-expected cleanup times and higher-than-expected cleanup costs at LUST sites.

In all, EPA and its partners did not meet 20 of the 61 APGs for which performance data are currently available. These APGs are associated with 7 of EPA's 10 strategic goals. The Agency is considering the varied causes of these shortfalls—legal issues; implementation of new, more stringent regulations or requirements; redirection or shortages of staff and resources; unforeseen technical complexities in cleanup or remediation processes; and other factors—as it adjusts its work and APGs for FY 2002 and proceeds to plan and set priorities for FY 2003 and beyond. The performance data charts included in Section II provide more complete information on these missed targets and discuss the progress the Agency has made toward its goals.

IMPROVING RESULTS

During FY 2001 EPA continued to sharpen its focus on achieving results and improving performance. In August 2001 the Agency launched an effort to examine a number of its current management practices—including priority-setting; planning and budgeting; and performance tracking, measuring, and reporting—with an eye toward strengthening these processes and improving the way the Agency works with its partners to focus resources on areas of greatest concern and achieve better results. In addition, the Agency continues to advance its work by strengthening its partnerships, further developing its capability to

conduct and apply the results of program evaluation activities, improving performance tracking and measurement, addressing data quality issues, and looking ahead to anticipate future trends and issues.

Strengthening Partnerships

The advances in protection of human health and the environment made over the past year and discussed in the goal chapters that follow would not have been possible without the participation and collaboration of the Agency's federal, state, and tribal partners. During FY 2001 EPA worked in particular to strengthen its partnership with states and tribes to focus on environmental results and make more effective use of collective resources. In spring 2001, for example, states and tribes participated in the Agency's FY 2003 planning and priority-setting process and in a May "lessons learned" forum on improving the Agency's annual performance report.

In August 2001 Administrator Christine Todd Whitman initiated an effort to advance EPA-state performance partnerships under the National Environmental Performance Partnership System (NEPPS). Within the limits of its statutory and regulatory authorities, EPA is working to provide the states with as much flexibility as possible to address state priorities and achieve the greatest environmental results. During FY 2001 EPA Regional Administrators began to meet individually with state leaders to maximize the opportunities available through negotiation of performance partnership agreements and grants. Discussions focused on the flexibility available under performance partnerships, creating additional incentives for participation, and the testing of better measures of program performance. In FY 2001 EPA also began to consult closely with states on two new initiatives to promote achievement of environmental results: designing a strategy for developing and applying innovative approaches ("Innovating for Better Environmental Results") and developing an "Information Agenda" that will establish a strategic vision and goals for the role of information in environmental programs in the coming years.

EPA also continues to work closely with tribal governments to identify priorities for Indian Country, to improve management of environmental issues, and to develop tribal capability to implement environmental programs. EPA's Indian Program involves significant cross-Agency and multimedia activities designed to ensure that the Agency's trust responsibility to federally recognized tribes is carried out.

In July 2001 Administrator Whitman met with the Tribal Operations Committee to reaffirm the Agency's Indian Policy and the Tribal Operations Committee Charter. The Indian Policy outlines the Agency's firm commitment to principles that promote partnerships with tribes as an integral part of EPA's system to carry out its mission of environmental protection. The re-signing of the Tribal Operations Committee Charter further demonstrates the Administration's support for EPA-tribal government partnerships. EPA is committed to ensuring protection of the environment and human health in Indian Country in a manner that is consistent with the government-to-government relationship and conserves cultural use of natural resources.

EPA also continued to collaborate closely with other federal agencies on a variety of efforts, from research and development projects to the design and implementation of cooperative programs to advance protection of the environment and human health. For example, under the Agency's National Coastal Assessment Program, EPA, the U.S. National Oceanic and Atmospheric Administration, and U.S. Geological Survey laboratories in the Southern Atlantic and Gulf of Mexico regions worked with the Delaware River Basin Committee and 24 of 26 coastal-marine states and tribes to assess the condition of the Nation's coastal resources. In another joint effort to develop information and analytical methods that will improve EPA's economic analyses of its policies and regulations, the Agency worked with the National Science Foundation on solicitations designed to support economic research in a number of key areas.

Apart from such research initiatives, EPA continued to develop and implement environmental programs in partnership with its sister agencies. An important area of collaboration, for example, involves the cleanup of federal sites. During FY 2001 EPA worked with the U.S. Department of Defense, the U.S. Department of Energy, and other federal agencies to complete construction at 3 Superfund sites, to complete cleanups at 28 removal sites, and to sign 4 interagency agreements to obtain enforceable cleanup commitments. In the area of protecting human health, EPA and the U.S. Food and Drug Administration (FDA) developed a national advisory for children and women of childbearing age

on mercury in commercial and noncommercial fish. EPA and FDA, in cooperation with the Centers for Disease Control, distributed the advisory throughout the U.S. medical community.

Examples of significant partnership efforts with federal agencies, states, tribes, and local governments are highlighted in the individual goal chapters in Section II.

Using Program Evaluation

During FY 2001 EPA made significant strides in building Agency-wide capability to conduct program evaluation and fostering the use of program evaluation as a management tool for continuous improvement. These efforts will help EPA keep pace with the rapidly expanding evaluation activities conducted at the state level and with the emergence of Environmental Program Evaluation as a nationally recognized subdiscipline of program evaluation. For example, in FY 2001 EPA's Office of the Inspector General (OIG) and Office of Research and Development (ORD) participated in a joint pilot program evaluation focused on the Agency's pollution prevention and new technologies research program. The pilot used a "logic model," which allows evaluators to identify relationships among resources, activities, outputs, customers, and outcomes, to assess environmental research within the context of the Agency's strategic goals and objectives. The pilot demonstrated the potential benefits of a partnership approach to program evaluation and pointed out the need to focus on outcomes to identify the impacts of research on long-term environmental results.

To continue to foster such program evaluation efforts, EPA has developed a Program Evaluation Network of more than 50 members who actively promote program evaluation within the Agency. In addition, EPA has accelerated the application of evaluation practice within the Agency by centrally funding internal evaluations on a competitive basis. From the FY 2001 competition, the Agency selected 6 out of 23 proposals for funding, allowing evaluation of a variety of environmental programs. These evaluations are under way and will be reported in the FY 2002 Annual Report.

Improving Environmental Indicators and Performance Measurement

EPA recognizes the need to make greater use of outcome-oriented performance goals and measures. Therefore, the Agency has continued to invest in the development of environmental indicator, monitoring, and management systems that will improve its capability to measure results, plan accordingly, and manage its work to achieve environmental and health outcomes. During FY 2001 EPA initiated a variety of projects to improve performance measurement: conducting training and workshops; preparing analyses to support development of more outcome-oriented goals and measures; benchmarking performance measures used by other agencies with similar functions; and working with its federal, state, tribal, and local government partners and with other stakeholders to improve environmental indicators and measures.

For example, to increase national and state capabilities for strategic monitoring of ecological health, EPA worked with 24 states to complete the first national survey of coastal waters, completed an integrated assessment of the Mid-Atlantic Highlands, and initiated the Western Pilot Study to demonstrate the use of ecological indicators for streams in the 12 western states. Approximately 30 states are evaluating new monitoring designs and a core set of ecological indicators that provide consistent data on quality of the environment and identify changes taking place. Regional vulnerability analyses that use socioeconomic factors to forecast environmental conditions more reliably are being tested in forests in the eastern United States.

In addition, through its Science to Achieve Results competitive research grants, EPA established five Estuarine and Great Lakes Programs at major academic research institutions with coastal expertise. These institutions will work to develop the next generation of environmental indicators for use by the states in assessing the biological health of estuaries and the Great Lakes.

In FY 2001 a cooperative agreement between EPA and Florida State University (FSU) supported the "Chemical and Pesticides Results Measures" project and its first published report. The purpose of the project is to develop a set of environmental outcome indicators and measures for toxic substances, pesticides, and pollution prevention. By working in cooperation with FSU, stakeholders, and the Pollution Prevention

Roundtable, EPA will identify indicators and measures that federal, state, and local agencies; tribal entities; and others will find useful in describing, measuring, and understanding environmental trends and conditions in response to environmental programs. Data generated from this project, targeted to a broad audience of potential users, will be used in improving FY 2002 and FY 2003 annual performance goals and measures. The second phase of the project will provide a foundation for additional work on environmental indicators.

The Agency completed several other indicators projects during FY 2001, including the report *Development, Selection, and Pilot Demonstration of Preliminary Environmental Indicators for the Clean Water State Revolving Fund*. The product of a joint EPA/state work group, the report demonstrated the feasibility of applying a set of 7 environmental indicators to 62 State Revolving Fund projects in 6 states.

Addressing Data Quality Problems

While data quality continues to present a significant management challenge for EPA, the Agency's FY 2001 performance data generally can be considered acceptably reliable and complete, according to criteria established by the Office of Management and Budget (OMB) and discussed in OMB Circular A-11. (See Appendix B for a more complete discussion of data quality issues.) Most of the Agency's performance data are collected in major EPA data systems that are subject to Agency-wide data quality standards and periodic audits for accuracy and completeness. As indicated in Appendix B, some common limitations in the performance data are inconsistencies in data collection methods among multiple data sources; inaccuracies due to imprecise measurement or unrepresentative statistical sampling; and uncertainties associated with survey, voluntarily reported, or modeled data. The Agency is committed to full disclosure of these limitations and is working to make significant improvements in its quality systems. For many measures, EPA relies on states and other external sources for performance data and the quality assurance/quality control protocols already in place. The Agency is making significant efforts to engage its partners in improving detection and correction of data error, standardizing measures, and improving the exchange of electronic data and data quality information.

EPA's performance data used to determine whether APGs have been attained are complete for most performance measures. (See performance data charts provided with each goal chapter in Section II.) Where performance data are not yet available, Appendix B indicates when complete data are expected.

During FY 2001 EPA undertook several initiatives to improve the quality of environmental data used to support performance measurement. For example,

- In response to the EPA OIG's declaration of laboratory quality systems as one of the Agency's top 10 "management challenges," independent technical assessments of EPA laboratories were conducted to determine whether laboratory operating systems are producing environmental data of known and documented quality. The assessments identified a number of "best practices" that are being shared across the laboratory community.

- EPA worked with the American Council of Independent Laboratories to develop environmental laboratory ethical standards and train public and private sector laboratory staff and managers on ethical conduct.

- EPA developed the Data and Information Quality Strategic Plan which, when implemented, will improve the measurement and quality of the Agency's data and information over the next 5 to 10 years. The plan provides six overarching recommendations: (1) create an Agency-wide information quality network to clarify the roles, responsibilities, and relationships of Agency staff having data quality functions; (2) develop and require the use of standard data quality indicator metadata; (3) improve implementation of quality assurance requirements for grantees; (4) regularly assess and report on standard quality measures throughout the information life-cycle; (5) expand quality training for EPA and grantees; and (6) provide guidelines to improve information use and product development. The plan represents one Agency response to a major management challenge identified by the General Accounting Office and EPA's OIG. (See Section III, "Management Accomplishments and Challenges," for further discussion.) Further Agency responses to this challenge include implementation of the Central Data Exchange (CDX), which allows the seamless, secure exchange of quality data between EPA and

its industrial and governmental partners. Three EPA programs (Toxics Release Inventory, Air, and Drinking Water) now use the CDX.

- EPA adopted a government-wide standard for quality system requirements for contractors and grantees and issued interim guidelines for its use. The Agency is now revising its official policy.
- EPA reviewed 14 organizational Quality Management Plans (QMPs) and approved 9. QMPs, which describe data quality management responsibilities, are required for every EPA organization that collects or uses environmental data. The Agency scheduled follow-up assessments of QMP implementation. EPA also reviewed eight quality systems.
- EPA undertook a formal assessment of Agency-wide, quality-related training needs. The Agency also made progress in improving data quality under specific programs.

While undertaking long-term improvements in data quality, it is important for EPA to disclose the limitations of its data supporting specific goals and measures, as reflected in Appendix B. EPA's long-term strategies—including the *Data and Information Quality Strategic Plan*—will address recognized Agency vulnerabilities in data quality management within and across programs.

Considering Future Trends

Apart from long-standing environmental protection issues, new areas of focus will challenge EPA's ability to look to the future and plan strategically. The future will likely be characterized by increased rates of change and greater uncertainty about the responses of complex biological, ecological, social, and political systems to this rapid change. EPA is exploring ways to keep pace with these developments by looking ahead to gain a better understanding of potential threats to ecological and human health. Issues such as global warming, biotechnology, or threats to biodiversity will require the forging of new cooperative relationships with EPA's federal, state, tribal, and local government partners and with the Agency's stakeholders.

The collective perspective about what actually constitutes "the environment" also is changing. As we begin to appreciate the extent to which humans depend on the ecological systems of the planet, it is becoming clear that numerous issues, previously thought of as independent of the environment, are in fact connected to it. Human health, the economy, social justice, and national security—particularly in terms of the potential for ecoterrorism—all have important environmental aspects because each is dependent to some degree on the structure, functioning, and resiliency of ecological systems.

In today's world, population growth and the resources consumed to sustain this growth are altering the earth in unprecedented ways. Over the next 25 years, for example, the world's population will grow by nearly 2 billion people, largely in developing areas. By 2025 an estimated 2.7 billion people will live in areas experiencing severe water scarcity, creating a potential for major regional conflicts over water rights. Domestically, growth in the southern and southwestern regions will pose major water management issues: water and wastewater infrastructure maintenance, aquifer depletion, and prevention of surface water contamination.

Further, as the population continues to grow, the Agency's general environmental concerns, such as air quality, are likely to continue. Urbanization of previously underdeveloped areas will potentially generate a greater demand for transportation infrastructure, leading to increases in vehicle miles traveled and emissions of conventional pollutants and greenhouse gases like carbon dioxide.

As EPA looks to the future, it will need to employ innovative approaches and sound science to investigate complex, interdisciplinary problems in environmental protection. The Agency will need to expand its efforts for interagency and international cooperation to address environmental issues on an increasingly global scale. Considering energy efficiency and the impacts of energy use—from global climate change to acid rain and multi-pollutant air emissions—promoting closed-loop manufacturing technologies to prevent or reduce pollution, and encouraging design for the environment are among the strategies the Agency is now exploring.

LOOKING AHEAD

As noted earlier, in August 2001 EPA launched a new effort to examine and strengthen its current management practices to achieve better results. As part of this "Managing for Improved Results" initiative,

during FY 2002 a Steering Group of senior Agency leaders will consider options for improving EPA's strategic planning, annual planning and budgeting processes, performance measurement, and capability to implement results-based management. As a result of this work, the Agency expects both to make incremental changes to its processes and systems and to effect far-reaching reforms that improve the way it works with its partners to achieve environmental results.

The Agency continues to strive toward making more effective use of performance and results information to inform internal planning and decision-making and to inform the public. In FY 2001 EPA initiated an Agency-wide "Environmental Indicators Initiative" to gather the information it needs to evaluate its progress and make sound, strategic decisions. Environmental indicators are used to track and measure the environment's capacity to support human and ecological health. EPA and others will use indicators such as ozone concentrations, nutrient levels exported from watersheds, and blood lead concentrations to describe and assess conditions, stressors, exposure, and response and to show progress toward meeting management or performance goals. In FY 2002 EPA plans to compile the indicators information it collects to develop the Agency's first State of the Environment Report.

Applying Lessons Learned

EPA is using its FY 2001 results to adjust approaches and develop new strategies for FY 2002 and beyond. In some cases FY 2001 performance information has indicated a need to revise existing annual targets. For example, EPA did not achieve its target for Superfund construction completions in FY 2001. Several factors account for the FY 2001 decline in completions including the large size and considerable complexity of remaining sites. Based on this experience EPA is reducing its FY 2002 construction completion target and reevaluating the constraints and complexity of remaining Superfund sites.

On the other hand, based on FY 2001 performance, the Agency expects that in FY 2002 states will be able to complete more drinking water source assessments than anticipated. In this case national targets were originally established when states were in the early stages of implementing the assessment program and were focused on the preliminary steps necessary to establish source water protection programs (hiring staff, collecting data, setting up databases, presenting plans to the public). Because states have completed these preliminary steps, they will likely undertake source water assessment and prevention activities at a faster pace in the future.

Similarly, EPA has adjusted several of its criteria pollutant targets for FY 2002 based on FY 2001 results. In particular EPA is working with states to ensure that they continue to make progress toward attaining the ozone standard as the Agency continues to develop a policy to make the transition from the 1-hour standard to the 8-hour standard.

In other cases the lessons EPA has learned from its FY 2001 performance, although not specifically affecting goals or targets, will influence program strategies for the future. For example, to achieve clean water, the Agency is continuing to meet its goals for the issuance of effluent limitations guidelines. However, the Agency recognizes as a continuing challenge its capability to adequately document actual loadings reductions given the limited data available. To help address this problem and implement an overall loadings reductions strategy, EPA will take steps in FY 2002 to determine the number of facilities in each major program. This will greatly improve the Agency's capability to model expected reductions and validate these models using the limited data available.

Lessons learned in FY 2001 were similarly helpful in reevaluating the Agency's Great Lakes Program. Preliminary 2001 data show dissolved oxygen concentrations in Lake Erie's central basin to be near the worst observed during the past 5 years, despite international success in reducing phosphorus loadings. To understand and address this puzzling challenge, EPA's Great Lakes Program is shifting program emphasis to develop missing information such as external phosphorus load calculations, to research further the biological effects, to publicize the problem, and to integrate research and management efforts through the Lake Erie Lake Management Plan.

Finally, the unexpected and tragic events of September 11, 2001, have raised new concerns about the safety of the Agency's workforce. Like other federal agencies, in FY 2002 EPA will implement a national initiative to address security vulnerabilities and

risks at all of its facilities. This work might lead to the identification of new performance goals and measures under a number of EPA's strategic goals.

FINANCIAL ANALYSIS

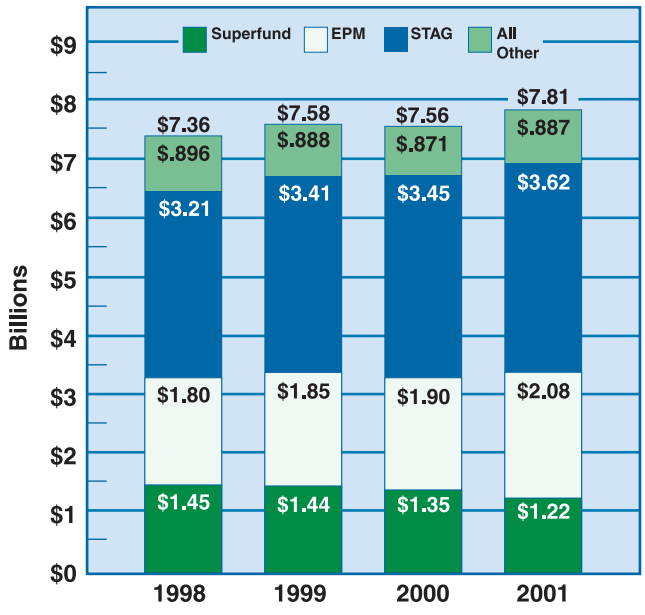
EPA continues to focus on integrating financial information with program performance information to strengthen its planning, analysis, and accountability process. A key goal is to provide program managers with timely and useful cost information and financial analysis to better inform the decision-making process and ensure taxpayer dollars are used effectively and efficiently in protecting the environment and public health.

The financial statements provided in Section IV are one important example of Agency accountability, in that they provide a snapshot of EPA's financial position at the end of the fiscal year. These financial statements are prepared in accordance with established federal accounting standards and audited by EPA's OIG. The discussion that follows is a supplement to the financial statements and describes EPA's resources and how they are used to accomplish the Agency's mission.

FY 2001 Budgetary Resources: EPA Appropriations

Any discussion of finances begins with the appropriations process. An appropriation is a legal authority to spend funds for purposes designated in an appropriations act. Congress appropriates funding for EPA in annual legislation covering appropriations for the Department of Veterans Affairs, the Department of Housing and Urban Development, and Independent Agencies. For FY 2001 EPA's appropriated resources totaled $7.8 billion. As indicated in the chart, three appropriations—Environmental Programs and Management (EPM), State and Tribal Assistance Grants (STAG), and Superfund—continue to make up a substantial portion of the Agency's resources. The EPM appropriation funds most of the Agency's payroll and infrastructure. As its title implies, STAG primarily funds grants to state and tribal partners for carrying out their environmental programs. The Superfund appropriation funds cleanup of abandoned hazardous waste sites. Finally, "All Other" EPA appropriations include funding for Science and Technology, Buildings and Facilities, Office of Inspector General, and a number of smaller appropriation accounts.

Appropriations by Fiscal Year



Obligations and Costs

For FY 2001 EPA is reporting both obligations and costs incurred in performance of its 10 goals. This presentation should provide a better link between the funds budgeted and the resources actually used to accomplish each goal.

EPA's budget execution can be viewed in two ways: as obligations and as costs. Obligations reflect legal authority and commitments to incur costs on the part of the government. For example, an obligation is recognized when the government awards a contract or a grant. In contrast, costs are recognized when the contractor actually delivers the requested goods or services. By reporting obligations, EPA can show the use of its budgetary resources in terms of contractual commitments made to achieve its environmental goals, and costs measure the obligated resources actually consumed during the reporting period in achieving its goals.

FY 2001 obligations incurred in connection with EPA's 10 goals are presented in the FY 2001 Obligations by Goal chart.[3] FY 2001 costs incurred to achieve the Agency's 10 goals total $8.1 billion and are summarized in the Costs by Goal chart.[4]

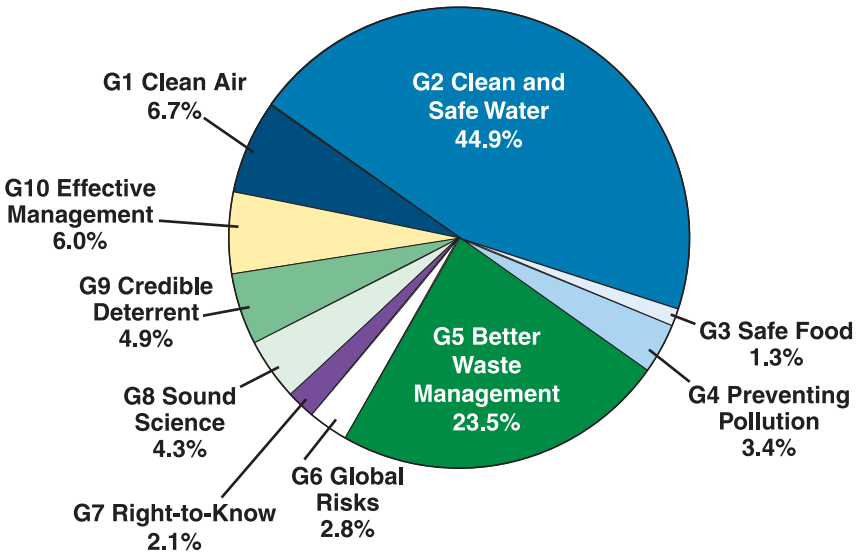
[3] The total obligations in the chart differ from amounts reported in the Agency's financial statements in Section IV because of different accounting and presentation requirements. The basis for the chart is consistent with Office of Management and Budget (OMB) budgetary guidance, whereas the financial statements are based on generally accepted accounting principles.

[4] The chart indicates EPA's gross costs. EPA's "net" costs are reported in Section IV, under "Statement of Net Costs." "Net" costs are defined as the gross costs offset by associated exchange revenues, e.g. Superfund cost recoveries and user fees.

FY 2001 OBLIGATIONS BY GOAL (Dollars in Millions)													
Appropriation	**G-1**	**G-2**	**G-3**	**G-4**	**G-5**	**G-6**	**G-7**	**G-8**	**G-9**	**G-10**	**Reim.**	**Other**	**Total**
State & Tribal Assistance Grants	218	3,006	0	100	73	127	0	0	72	0	30	0	3,626
All Other	341	574	95	199	274	207	167	337	304	367	268	31*	3,164
Superfund	0	0	0	0	1,354	0	4	3	15	71	136	634**	2,217
TOTAL	**559**	**3,580**	**95**	**299**	**1,701**	**334**	**171**	**340**	**391**	**438**	**434**	**665**	**9,007**
% of Total	*6.21*	*39.75*	*1.05*	*3.32*	*18.89*	*3.71*	*1.90*	*3.77*	*4.34*	*4.86*	*4.82*	*7.38*	*100.00*
NOTE: Actual costs are reflected in Section IV - Annual Financial Statements													

* The $31 million for the All Other appropriations row represents transfers from other federal agencies.
** The $634 million for the Superfund row represents a payment from general revenues to the Hazardous Substance Superfund.

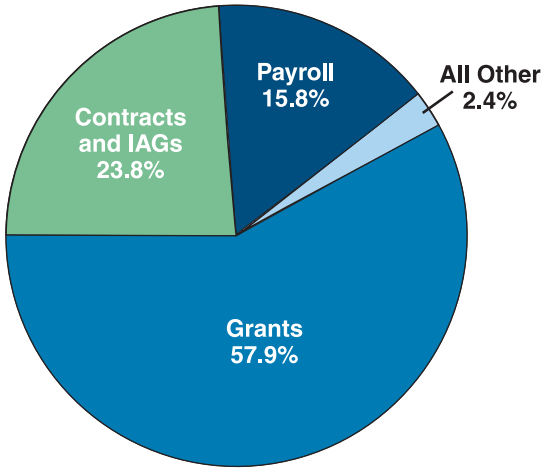
FY 2001 Gross Costs by Goal



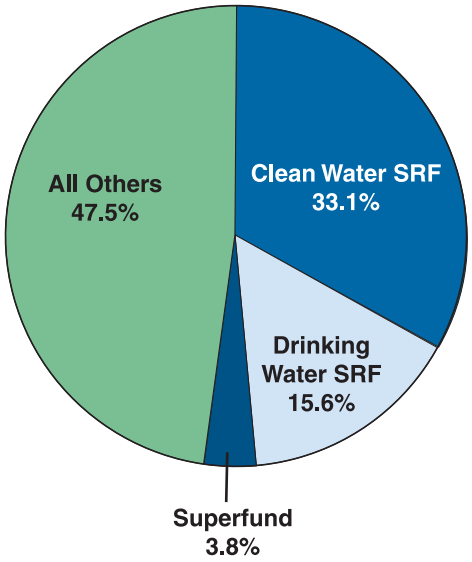
EPA's obligations and costs are largely incurred for services performed outside the Agency. As illustrated in the FY 2001 Cost Categories chart, more than 80 percent of EPA's costs are in the form of contracts or grants.

Most of EPA's costs are associated with grant programs, and nearly half of the Agency's grants are awarded from two state revolving funds (SRFs). The Clean Water SRF (CWSRF) provides assistance for wastewater and other water projects, such as those dealing with nonpoint sources, estuaries, and storm water. The Drinking Water SRF (DWSRF) provides financing for improvements to community water systems to assist compliance with the Safe Drinking Water Act and also allows states to use grant funds for other activities that support their drinking water programs. (See Section II, Goal 2, for more information on the SRFs.)

FY 2001 Cost Categories



FY 2001 Major Grant Categories



Funding for both is awarded as grants to states and tribes, which then make loans to municipalities and other entities for construction of infrastructure projects, purchases of land or conservation easements, and implementation of other water quality activities. Additional funds from state match and leveraged bond proceeds expand the capital available in the SRFs to address priority water quality and public health needs, while loan repayments and earnings ensure funding for these activities far into the future. The flexibility and revolving nature of the SRFs have provided states with a powerful tool to apply needed funding toward their clean water and drinking water infrastructure needs.

Through 2001 CWSRFs have turned $18 billion in federal capitalization grants into over $34 billion in assistance to municipalities and other entities for water projects. In recent years CWSRFs have directed $3 billion to $4 billion in loan assistance to water projects. Approximately $200 million of these funds are used each year to prevent polluted runoff, making the CWSRF an effective tool in addressing nonpoint source problems.

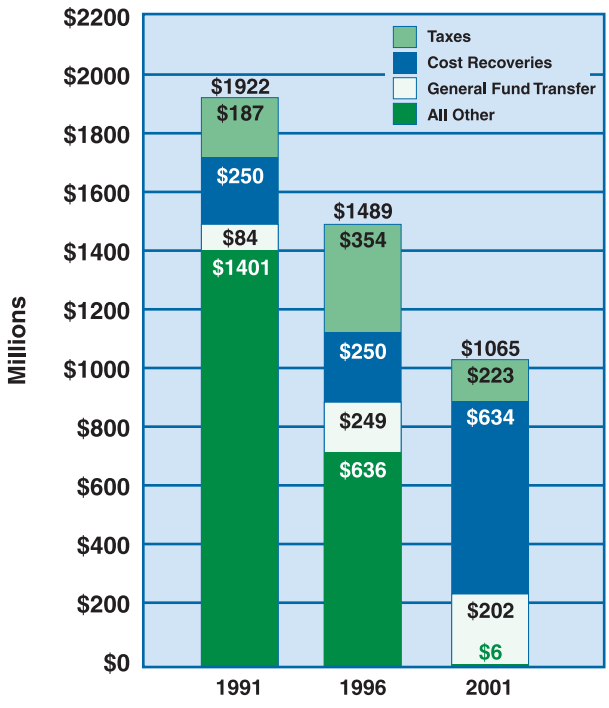
Likewise, the newer DWSRFs have turned $3.6 billion in federal capitalization grants into over $3.8 billion in loan assistance, of which $1.3 billion was provided in assistance in FY 2001 alone. States have also used $576 million of their DWSRF grants to fund other programs and activities that enhance water system management and protect sources of drinking water.

The large dollar volume of these two grant programs is the reason that more than 44 percent of EPA's costs are incurred in connection with its Clean and Safe Water goal. Other grant programs include categorical assistance to states and tribes, consistent with EPA's authorizing statutes, and research grants to universities and other nonprofit institutions.

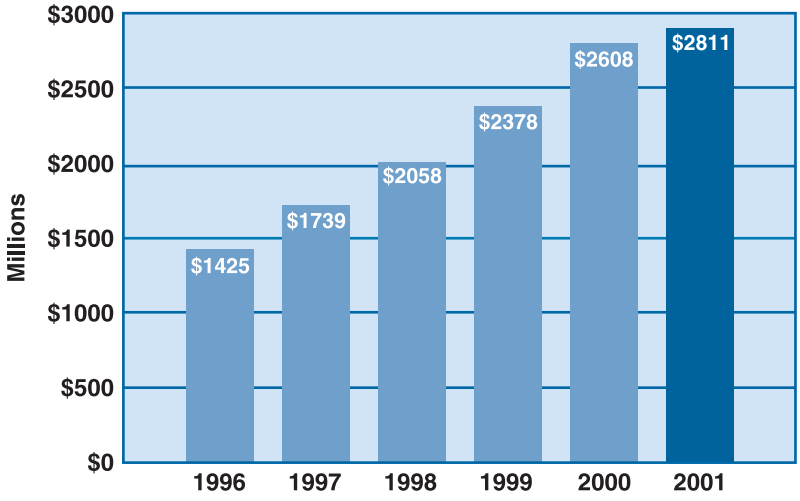
Superfund Financial Trends

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) established the Superfund Program and the Hazardous Substance Response Trust Fund, now known as the Superfund. The Superfund Program addresses the remediation of hazardous waste from abandoned sites around the country and emergency response for new spills and other incidents. Prior to FY 1996 the bulk of Superfund financing consisted of special taxes. Although CERCLA has not been reauthorized since it expired in 1995, the Superfund Program continues to operate each year. With CERCLA's expiration, the taxing authority also expired, resulting in a shift of Superfund financing sources as shown in the Cumulative Superfund Trust Fund Cost Recoveries, FY 1996 through FY 2001 chart. Appropriations from general revenues now constitute the largest share of Superfund trust fund revenues. At the same time cost recovery revenues have increased markedly since FY 1991, when the cumulative total stood at $359 million.

Superfund Trust Fund Revenue Sources



Cumulative Superfund Trust Fund Cost Recoveries FY 1996–FY 2001



Despite declining revenues to the Superfund Trust Fund, special account revenues have continued to grow. Under CERCLA Section 122(b)(3), EPA may retain and use the proceeds it receives under settlement agreements to conduct response actions at Superfund sites. Funds received under these settlements are subsequently placed in interest-bearing, site-specific accounts known as special accounts. Until recently only the future cost (or "cashout") component could be placed in a special account, and any corresponding past cost (or cost recovery) amounts were deposited in the Superfund Trust Fund. Based on a recent legal opinion by EPA's Office of General Counsel, however, it was determined that both past and future cost amounts could be placed in special accounts. Combining these amounts will make more resources readily available without an appropriation for EPA-lead site responses and to reimburse responsible parties for response work performed at sites pursuant to settlement agreements with the Agency.

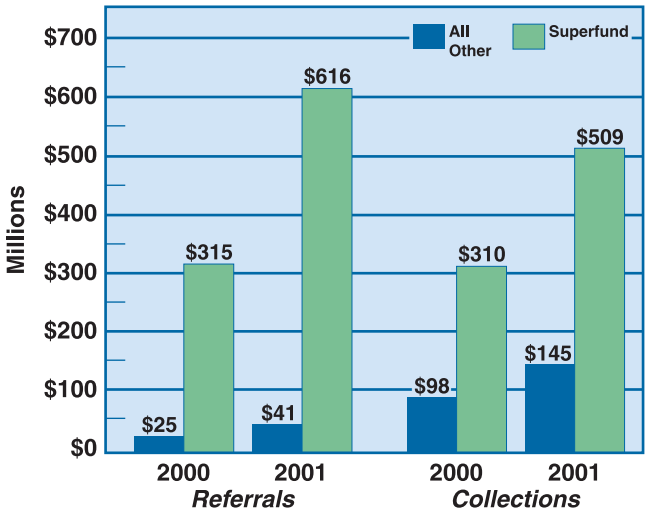
As of September 30, 2001, EPA had established 197 special accounts with $878 million in receipts. These accounts earned an additional $135 million in interest. At the end of FY 2001, EPA had disbursed $326 million from its special accounts and had unliquidated obligations of $118 million and an unexpended balance of $569 million.

Accounts Receivable and Debt Management

Improvement in management of the federal government's debt portfolio has been a concern of Congress in the past decade and is manifested in the 1996 passage of the Debt Collection Improvement Act, which supplemented previous authorities for debt management. EPA's accounts receivable do not approach the level of other major federal creditor agencies. The Agency, nonetheless, manages a gross debt portfolio that exceeded $1 billion in each of the past 3 fiscal years.

More than three-fourths of EPA's accounts receivable are Superfund-related. Effective management of Superfund debts requires close collaboration between two EPA offices (the Office of the Chief Financial Officer and the Office of Enforcement and Compliance Assurance) and the U.S. Department of Justice (DOJ). As illustrated in the Accounts Receivable Management chart, EPA experienced a significant increase in collection of all debts, delinquent and nondelinquent, from 2000 to 2001. In addition EPA has greatly stepped up its referral actions of delinquent debts to the appropriate collection organizations (the U.S. Department of Treasury for non-Superfund debts and DOJ for Superfund-related debts), which are set up to take more aggressive collection action.

Accounts Receivable Management



Innovative Environmental Financing: The Advantage of Public-Private Partnerships

EPA has several innovative environmental financing initiatives that enable the Agency to leverage federal funds through mutually beneficial public-private partnerships. Two examples are the Environmental Finance Program and the Brownfields Program.

The Environmental Finance Program employs leveraging to extend its reach and magnify its impact. The program has three related components that furnish financial outreach services to Agency customers and the regulated community. First, the Environmental Financial Advisory Board (EFAB), a federally chartered advisory committee, provides innovative ideas and recommendations to EPA's Administrator and program offices on ways to lower the costs of, and increase investments in, environmental and public health protection. Second, the Environmental Finance Center (EFC) Network, consisting of nine university-based programs in eight EPA regions, delivers targeted technical assistance to smaller communities on the "how-to-pay" issues of providing safe and reliable environmental services that meet standards. Third, the Environmental Financing Information Network (EFIN), through its popular web site and other means, catalogs the results of the Advisory Board and the EFC Network and presents valuable summaries of more than 350 environmental finance tools and 1,000 abstracts and case studies of environmental finance publications.

A good example of how the components work together to leverage results is presented by the EFC Directors who serve on the Advisory Board as expert witnesses, thereby bringing their unique perspective on finance issues and opportunities for the Board to consider and pass along to EPA. Another innovative example is the *charrette*, a panel of experts tailored to address a community's particular finance problem. After listening to the community, the panel exchanges questions and answers and then presents recommendations for actions the community should take. The panel is composed of finance experts and has often included EFAB members. Typically participating communities would not have access to advice of this caliber, and many communities have followed panel recommendations, saving significant resources in implementing their projects. EPA further leverages the *charrettes* by documenting their results and making them available as case studies through the EFC and EFIN web sites.

The Brownfields Program, one of EPA's most successful public-private partnerships, leveraged more than $3.73 billion in public and private investments and resulted in more than 17,000 jobs in cleanup, construction, and redevelopment through the third quarter of FY 2001. "Brownfields" are abandoned, idle, or underused industrial and commercial properties where redevelopment or expansion is complicated by real or perceived contamination. The primary goal of EPA's Brownfields Program is to provide states, tribes, and local governments with the tools and financial assistance needed to assess, clean up, and redevelop Brownfields properties. Since 1995, 2,594 properties have been assessed using federal funds and 876 properties have been assessed using leveraged funds. The 46 job training and development demonstration pilots have trained at least 700 participants, and more than 75 percent of the graduates have obtained employment to date. (See Section II, Goal 5, for more information.)

This Page Intentionally Blank